49. (Amended) A nucleic acid comprising a nucleotide sequence selected from the group consisting of [SEQ ID NOS:55-109] SEQ ID NOS:56-109.

86. (Amended) An isolated nucleic acid encoding a fragment of a gastro-intestinal tract receptor, which receptor is selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), or encoding a chimeric protein comprising said fragment, said fragment consisting essentially of the extracellular domain of the receptor.

87. (Amended) A cell containing and capable of expressing a recombinant nucleic acid encoding a fragment of a gastro-intestinal tract receptor, which receptor is selected from the group consisting of HPT1 (SEQ ID NO:178), hPEPT1 (SEQ ID NO:176), D2H (SEQ ID NO:179), and hSI (SEQ ID NO:181), or encoding a chimeric protein comprising said fragment, said fragment consisting essentially of the extracellular domain of the receptor.

IN THE DRAWINGS:

Please amend the drawings as follows:

Please amend the drawing of Figs. 10A-10C, sheets 21-23, as indicated in red ink on the sheets enclosed herewith. Substitute sheets of Figs. 10A-10C are also enclosed.

REMARKS

The Examiner has required an election under 35 U.S.C. § 121 of one of the following inventions:

I. Claims 1-21, 44 and 46-47, drawn to the protein, classified in class 530, subclass 350.

II. Claims 22-30, 40, 70, 73-74, 81-82 and 90-97, drawn to the composition, classified in class 424, subclass 185.1.

III. Claims 31-39 and 75, drawn to a method of delivery, classified in class 424, subclass 400.

IV. Claims 41 and 71, drawn to the chimerie protein, classified in class 530, subclass 387.3.

V. Claims 42, 43 and 45, drawn to the antibody, classified in class 530, subclass 387.

VI. Claims 48-69, 72 and 86-88, drawn to Recombinant Methods, classified in class 435, subclass 69.1.

VII. Claims 76-80, drawn to a method of testing or preventing disease, classified in class 514, subclass 12.

VIII. Claims 84, 85 and 89, drawn to assay methods, classified in class 436, subclass 86.

Upon the election of group VI, consisting of claims 48-69, 72 and 86-88, Applicants are further required to select no more than ten individual nucleic acid sequences for consideration.

Upon the election of group I, II or IV, Applicants have been additionally required to elect a single protein or composition, not as a species election but as the election of an allegedly separate invention. In a telephone conversation with Attorney for Applicants, Adriane M. Antler, on April 27, 2000, the Examiner has confirmed that this further restriction consists of selecting a single gastro-intestinal tract receptor.

In order to be fully responsive, Applicants hereby elect the invention of Group II, claims 22-30, 40, 70, 73-74, 81-82 and 90-97, drawn to the composition, classified in class 424, subclass 185.1, with traversal. Applicants further elect, also with traversal, compositions comprising peptides that bind to the gastro-intestinal tract receptor HPT1 (SEQ ID NO:178). Of SEQ ID NOS. 1-55, the peptides identified as HPT1-binding peptides are those peptide having SEQ ID NOS. 49-55.

With respect to the Examiner's division of the invention into eight groups, and the further division of groups I, II and IV to those peptides binding a single gastro-intestinal tract receptor, and the reasons stated therefor, Applicants respectfully traverse. Even assuming, *arguendo*, that Groups I - VIII and the peptides binding a specified receptor represented distinct or independent inventions, Applicants submit that to search and examine the subject matter of all the Groups together would not be a serious burden on the Examiner.

The M.P.E.P. § 803 (Seventh Edition, July 1998) states:

> If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

Thus, in view of M.P.E.P. § 803, all of claims 1-97 should be searched and examined in the subject application. Accordingly, Applicants respectfully request that the Restriction Requirement Under 35 U.S.C. § 121 be withdrawn and the instant claims be

examined in one application. At a minimum, claims directed to proteins (Group I) that bind to the gastro-intestinal tract receptor HPT1 (including SEQ ID NOS. 49-55) and those that bind to the gastro-intestinal peptide receptor hPEPT1 (including SEQ ID NOS. 31-48), and claims directed to compositions comprising these proteins (Group II) and methods of use thereof (Groups III, VII, and VIII) should be examined collectively, given their sequence similarities and motif conservation (see *e.g.*, Table 9 at page 62 of the original specification and at pages 63-64 of the substitute specification).

Pursuant to the Examiner's request to match all proteins and polynucleotide sequences with "SEQ ID NO." identifiers, Applicants have deleted pages 1-233 of the specification and drawings 10A-10C and submit herewith a substitute specification under 37 C.F.R. § 1.125(b) and substitute drawings 10A-10C under 37 C.F.R. § 1.121. The substitute specification includes a revised sequence listing and updated tables, which differ from the original specification in assigning new "SEQ ID NO." identifiers to sequences that originally were not assigned a SEQ ID NO. Further, these SEQ ID NO. identifiers are inserted into the text of the specification so as to be matched with the protein and polynucleotide names to which they correspond in the text of the specification. A comparison of the substitute specification with the original specification is also enclosed, with the additions to the substitute specification highlighted in grey and deletions in "strike through" text. The substitute drawings include a new column matching each peptide name and sequence to its SEQ ID NO. identifier.[1] A copy of the drawings with the newly added material, *i.e.*, the SEQ ID NO. identifiers, provided in red ink, pursuant to 37 C.F.R. § 1.121(a)(3)(ii) and M.P.E.P. § 608.02, is also submitted herewith. No new matter is added.

The claims have been amended to more particularly point out and distinctly claim that which Applicants regard as the invention. The amended recitation of claims 1-3, 6, 16-20, and 86-87, points out that the gastro-intestinal peptide receptor, and not the protein which specifically binds to a gastro-intestinal peptide receptor, is selected from the group consisting of HPT1, hPEPT1, D2H, and hSI. The claims have also been amended to match the names of the gastro-intestinal peptide receptor proteins HPT1, hPEPT1, D2H, and hSI with their sequence identifiers. Claim 48 has been amended to correct a clear typographical error. Claim 48 is directed to nucleic acids comprising a nucleic acid of SEQ ID NOS. 110-163. Unlike SEQ ID NOS. 111-163, however, SEQ ID NO. 110 corresponds to a peptide sequence.

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[1] Certain sequences have two SEQ ID NO. identifiers indicated, because these sequences were inadvertently assigned two different identifiers in the Sequence Listing.

Its inclusion in claim 48 is clearly erroneous and has been deleted. Claim 49 has also been amended to correct a clear typographical error. Claim 49 is directed to nucleic acids comprising a nucleic acid of SEQ ID NOS. 55-109. Unlike SEQ ID NOS. 56-109, SEQ ID NO. 55 corresponds to a peptide sequence. Its inclusion in claim 49 is clearly erroneous and has been deleted. Hence, no new matter is added.

CONCLUSION

Applicants respectfully request that the amendments and remarks above be entered and made of record in the present application. Applicants respectfully submit that all pending claims fully meet all statutory requirements for patentability. Action for issuance is respectfully requested.

If any outstanding issues remain, Applicants respectfully request that the Examiner call the undersigned to discuss such issues.

Respectfully submitted,

Date 5/3/00

Adriane M. Antler 32,605

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Enclosures